

CIVIC CENTER MASTER PLAN CITY COUNCIL MEETING



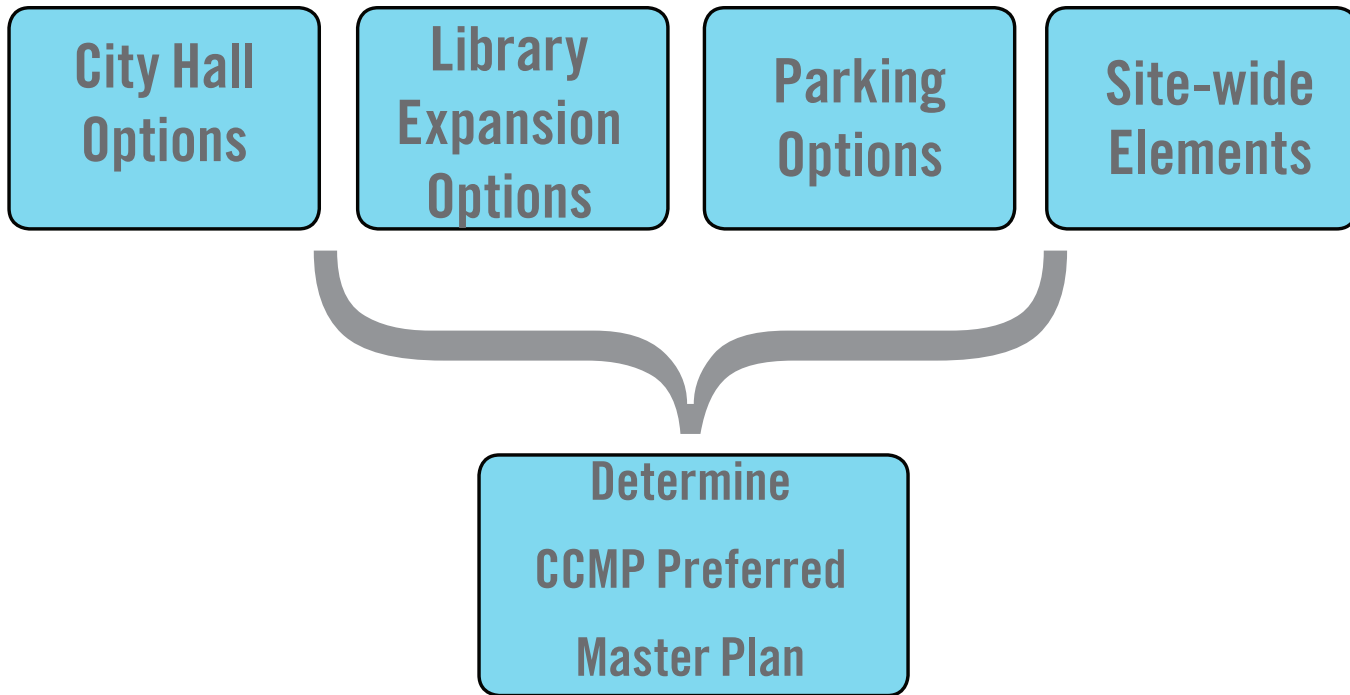
CITY OF CUPERTINO
OCTOBER. 21, 2014



ATTACHMENT L
PERKINS
+ WILL

CIVIC CENTER MASTER PLAN

WHY WE ARE HERE



CIVIC CENTER MASTER PLAN COMMUNITY WORKSHOP JULY 30



October 21, 2014



WHAT YOU ASKED OF US...

CONSIDER REUSING THE EXISTING CITY HALL

PROVIDE A COST & BENEFIT COMPARISON FOR CITY HALL SCENARIOS

PROVIDE COMPARABLE PRECEDENTS FOR CITY HALL

CITY HALL SCENARIOS

A

Existing City Hall

+ life safety (\$14.3M)

+ Site Work (not applicable)

B

Existing City Hall

+ immediate occupancy *, EOC (\$18M)

+ Site Work (not applicable)

C

**Existing City Hall
Complete Remodel**

+ immediate occupancy*,
EOC (\$26.8M)

+ Site Work (not applicable)

D

New City Hall

+ EOC (\$33.8M)

+ Site Work (\$3.4M)

E

New City Hall

+ Council Chambers (\$40.5M)

+ Site Work (\$3.4M)

CITY HALL SCENARIOS

LIBRARY PROGRAM

A Existing City Hall

+ life safety (\$14.3M)

+ Site Work (not applicable)

L1 Expand Library (\$3.1M)

B Existing City Hall

+ immediate occupancy *, EOC (\$18M)

+ Site Work (not applicable)

L1 Expand Library (\$3.1M)

C Existing City Hall Complete Remodel

+ immediate occupancy*,
EOC (\$26.8M)

+ Site Work (not applicable)

L1 Expand Library (\$3.1M)

D New City Hall

+ EOC (\$33.8M)

+ Site Work (\$3.4M)

L1 Expand Library (\$3.1M)

L2 Ex. Community Hall (\$0)

E New City Hall

+ Council Chambers (\$40.5M)

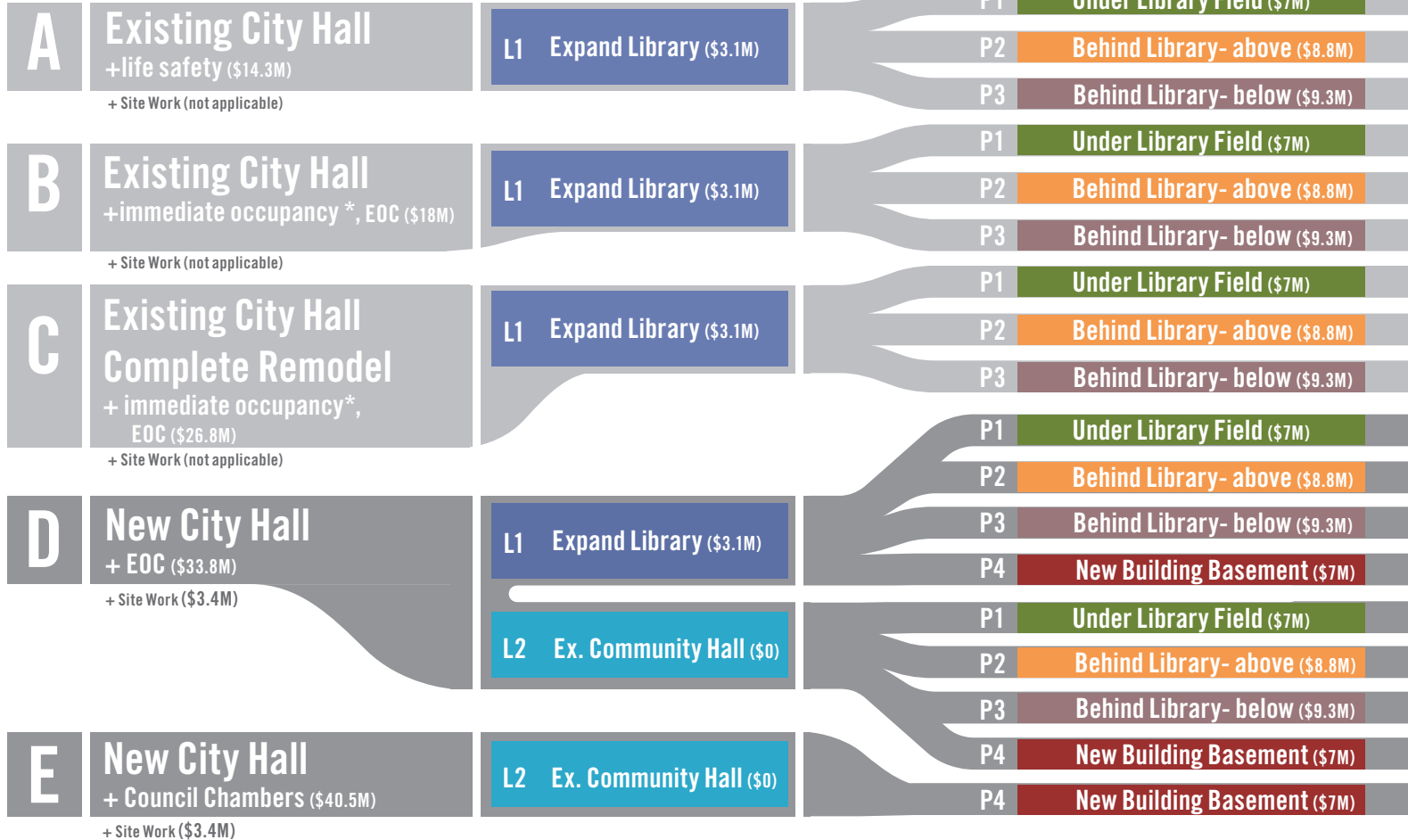
+ Site Work (\$3.4M)

L2 Ex. Community Hall (\$0)

CITY HALL SCENARIOS

LIBRARY PROGRAM

STRUCTURED PKG SOLUTION



CITY HALL SCENARIOS

STRUCTURAL TERMS EXPLAINED

Seismic/ Life Safety

- Life safety criteria implies significant damage to structure and non structural systems
- Facility relocation and downtime is anticipated
- Repairs may be costly or infeasible

Immediate Occupancy

- Prescriptive code criteria for Immediate Occupancy implies stronger structure
- Does not explicitly assure performance goals, relies on structural damage to absorb seismic energy
- May require costly repairs and facility downtime following major earthquake

Performance Based (Immediate Occupancy/ Fully Operational)

- Performance based to provide tailored structure to meet resiliency goals
- Explicit and quantified performance metrics for risk and life-cycle cost assessment
- Effective use of currently available technology (seismic isolation, viscous damping) to meet long term goals

EXISTING BUILDING ASSESSMENT

MECHANICAL

- All Mechanical Systems are 30+ years old, inefficient and need to be replaced
- Current codes require systems to be relocated elsewhere as they are not allowed to be in the same space
- Systems maintenance costs can be greatly reduced *

ELECTRICAL

- All Electrical Systems are past 30+ years old, inefficient and need to be replaced
- Light Fixtures are not energy efficient and require replacement to meet current codes
- Systems maintenance costs can be greatly reduced *

PLUMBING

- Existing plumbing fixtures are water inefficient
- ADA issues with current restroom layout
- Old piping infrastructure

* Current building is operating inefficiently at \$3.63/SF-yr & 106 kBTU/SF-yr (vs \$1.00 / SF-yr & 25 kBTU/SF-yr for new buildings)

EXISTING BUILDING ASSESSMENT








ARCHITECTURAL IMPLICATIONS

- Clay roofing tiles need to be removed and replaced with a lightweight material
- Accessibility upgrades are needed throughout
- Elevator and shaft needs to be replaced / enlarged
- Main stair needs upgrading to accommodate exiting
- Current facility does not meet requirements to house an EOC

ARCHITECTURAL CHALLENGES

- Majority of public interface are accessed through dark corridors or are in the basement
- Lack of daylight in basement workspaces / meeting spaces
- Current layout does not accommodate for projected 10% growth of city staff
- Workstations are inefficient and inflexible

CITY HALL COMPONENTS

						
SEISMIC UPGRADES (LIFE SAFETY)	SEISMIC UPGRADES (IMMEDIATE OCCUPANCY)	EMERGENCY OPERATIONS CENTER	MEP SYSTEMS UPGRADES	CITY HALL 10% EXPANSION	INTEGRATED UNDERGROUND PARKING	COUNCIL CHAMBERS

SEISMIC (LIFE SAFETY)	A	●			◐			
SEISMIC (IMMEDIATE OCCUPANCY) W/ EOC	B	●	◐	◐	◐			
EXISTING CITY HALL COMPLETE REMODEL	C	●	◐	◐	◐	●		
NEW CITY HALL BUILDING	D	●	●	●	●	●	●*	
NEW CITY HALL + COUNCIL CHAMBERS	E	●	●	●	●	●	●	●

* OTHER STRUCTURE PARKING SOLUTIONS POSSIBLE

● OPTIMAL

◐ LIMITED

A: LIFE SAFETY UPGRADE



CITY HALL

CITY HALL

STRUCTURAL (LIFE SAFETY)

- Roof Reinforcement
- Concrete Column Reinforcement (Fiber Wrap or secondary steel columns)
- Additional shear walls at ground level (at all 4 corners of building)
- Seismic Bracing of MEP equipment

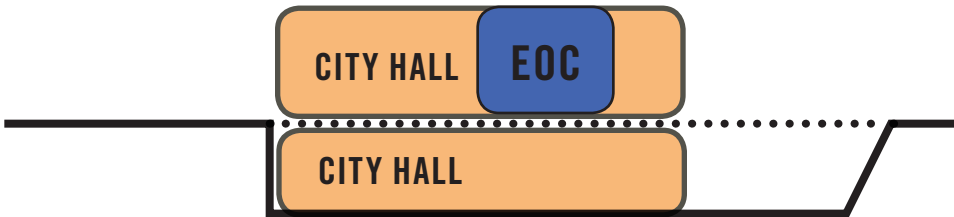
MEP SYSTEMS

- Mechanical Equipment Relocation / Replacement
- Electrical Equipment Replacement
- Lighting Upgrades for T24 compliance
- \$2.78 / sf / year (vs \$3.65)
- 70kBtu / sf / year (vs 92kBtu)

ARCHITECTURAL

- New Metal Roof
- Stair Upgrade
- Elevator replacement
- Accessibility Upgrades

B: IMMEDIATE OCCUPANCY + EOC



STRUCTURAL (IMMEDIATE OCCUPANCY)

- Additional shear walls at ground level
- Seismic Bracing of MEP equipment
- Extensive Roof Reinforcement
- Concrete Column Reinforcement (Fiber Wrap required)
- Thickening of shear walls at basement

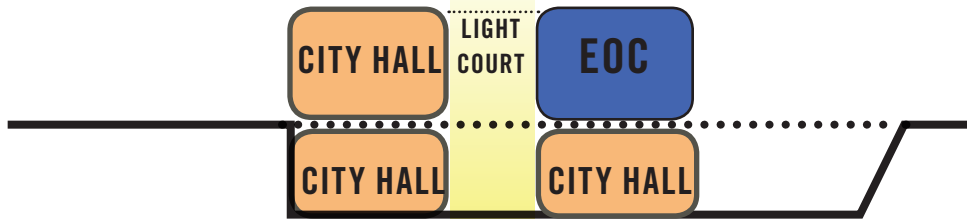
MEP SYSTEMS

- Mechanical Equipment Relocation / Replacement
- Electrical Panels / Equipment Replacement
- Lighting Upgrades for T24 compliance
- \$2.78 / sf / year (vs \$3.65)
- 70kBtu / sf / year (vs 92kBtu)
- Generator Replacement
- Pipe Anchorage and Seismic Attachments

ARCHITECTURAL

- New Roof Material
- Stair Upgrade
- Upgrade construction / finishes for fire rating
- Accessibility Upgrades
- Possible EOC Redesign
- Glazing replacement may be required if non tempered

C: COMPLETE REMODEL



STRUCTURAL (IMMEDIATE OCCUPANCY)

- Additional shear walls at ground level
- Seismic Bracing of MEP equipment
- Extensive Roof Reinforcement
- Concrete Column Reinforcement (Fiber Wrap required)
- Thickening of shear walls at basement
- Additional slab reinforcement at lightwell openings

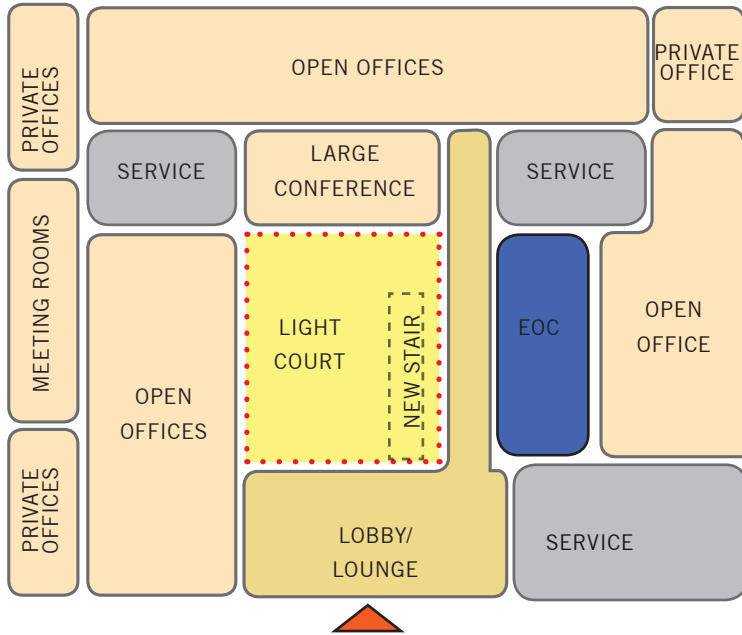
MEP SYSTEMS

- Complete MEP Equipment Relocation & Replacement
- Generator Replacement
- New Ductwork and conduit throughout
- New High Efficiency Lighting Layout / Fixtures
- \$1.59 / sf / year (vs \$3.65)
- 40kBtu / sf / year (vs 92kBtu)

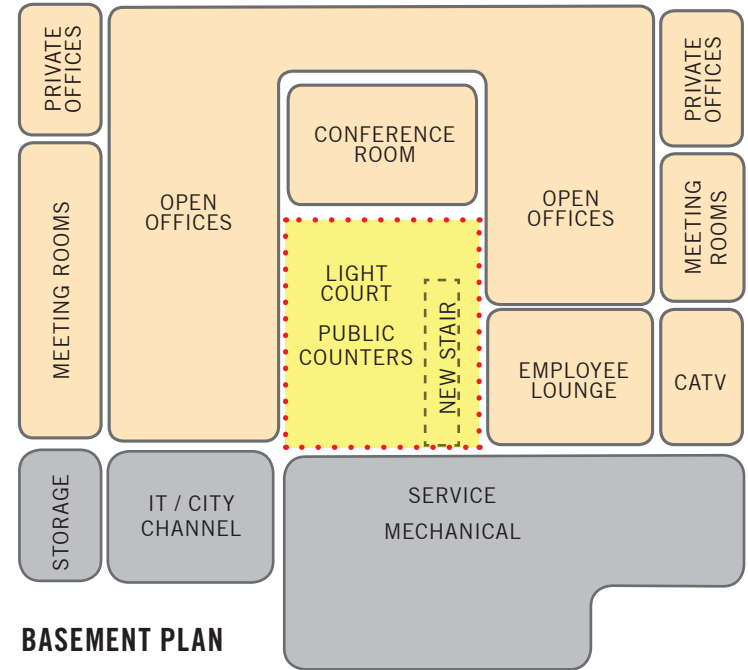
ARCHITECTURAL

- New Roof Material and Opening
- Accommodates City Hall 10% Expansion
- New layout to reflect future workspace trends
- Improved Public Experience
- Improved Daylighting

C: COMPLETE REMODEL

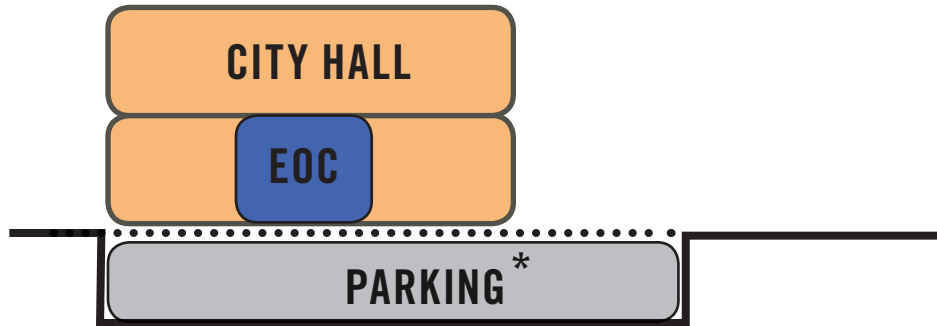


GROUND FLOOR PLAN



BASEMENT PLAN

D: NEW BUILDING



* Alternative structured parking solutions possible

STRUCTURAL

- New Structure that will be designed to explicitly handle the seismic requirements for immediate occupancy
- 50 Year Building

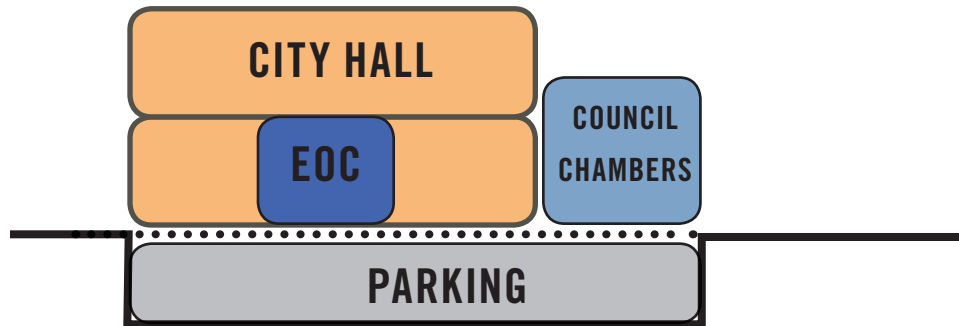
MEP SYSTEMS

- New Energy Efficient Systems that can be integrated in the building to minimize building maintenance costs.
- LEED Platinum
- Systems optimized for comfort (thermal, lighting, acoustics, user control, biophilia) and productivity
- **\$.99 / sf / year (vs \$3.65)**
- **25kBtu / sf / year (vs 92kBtu)**

ARCHITECTURAL

- Enhanced Civic Identity
- Accommodates City Hall 10% Expansion
- New layout to reflect future workspace trends
- Improved Public Experience / Amenities
- Maximize Daylighting
- Integrated Underground parking
- Flexibility and Expandability

E: NEW BUILDING+ COUNCIL CHAMBERS



STRUCTURAL

- New Structure that will be designed to explicitly handle the seismic requirements for immediate occupancy
- 50 year life span





MEP SYSTEMS
























- New Energy Efficient Systems that can be integrated in the building to minimize building maintenance costs.
- LEED Platinum
- Systems optimized for comfort (thermal, lighting, acoustics, user control, biophilia) and productivity
- \$.99 / sf / year (vs \$3.65)
- 25kBtu / sf / year (vs 92kBtu)

ARCHITECTURAL

- Enhanced Civic Identity
- Accommodates City Hall 10% Expansion
- New layout to reflect future workspace trends
- Improved Public Experience / Amenities
- Maximizes Daylighting
- Integrated Underground parking
- Flexibility and Expandability
- [Integrated Program enhances efficiency & maintenance](#)

EVALUATION CRITERIA

							
COST PER SQUARE FT.	IMMEDIATE OCCUPANCY POST EVENT	SEISMIC RESILIENCY	OPERATIONS MAINTENANCE SAVINGS	LIFE CYCLE COSTS REDUCTION	ADAPTABILITY + FLEXIBILITY	IMPROVED DAYLIGHTING + WORKPLACE	CIVIC IDENTITY + USER EXPERIENCE

SEISMIC (LIFE SAFETY)	A	\$333.00							
SEISMIC (IMMEDIATE OCCUPANCY) W/ EOC	B	\$441.00							
EXISTING CITY HALL COMPLETE REMODEL	C	\$663.00							
NEW CITY HALL BUILDING	D	\$646.00							
NEW CITY HALL + COUNCIL CHAMBERS	E	\$626.00							

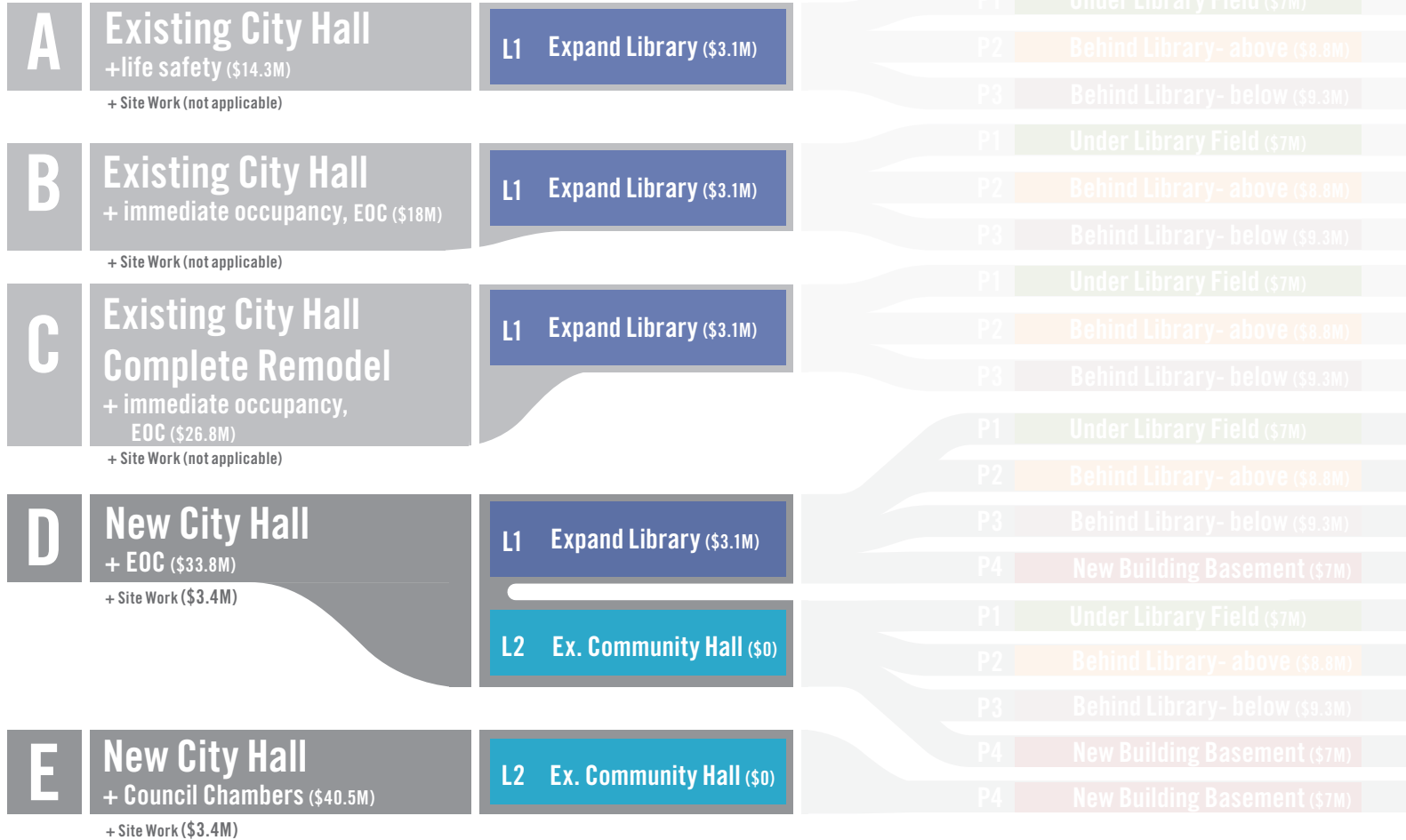
OPTIMAL  LIMITED 

LIBRARY PROGRAM EXPANSION

CITY HALL SCENARIOS

LIBRARY PROGRAM

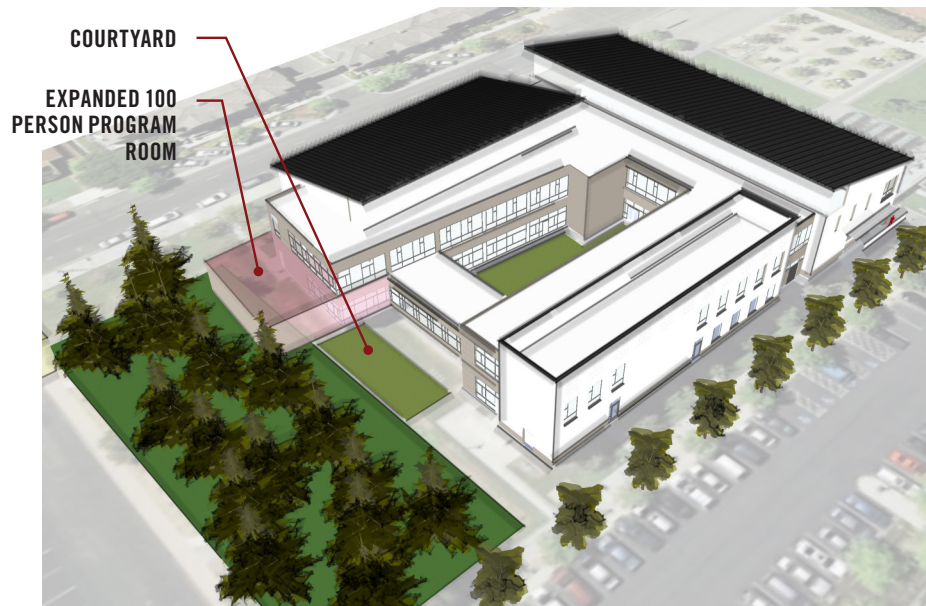
STRUCTURED PKG SOLUTION



CIVIC CENTER MASTER PLAN

L1: LIBRARY EXPANSION

OPTION 1: PROGRAM ROOM EXPANSION



summary

- Expands the current story room (540 sf) into a 100 person program / meeting room (2,500 sf)
- Will have its own restrooms and can function even when the rest of the library is closed
- Includes a new south entrance from parking lot
- Careful planning avoids the Memorial Grove however a survey is necessary to assess any impact to the redwood trees root system

CIVIC CENTER MASTER PLAN

L2: COMMUNITY HALL



OPTION 2: REPURPOSE COMMUNITY HALL

summary

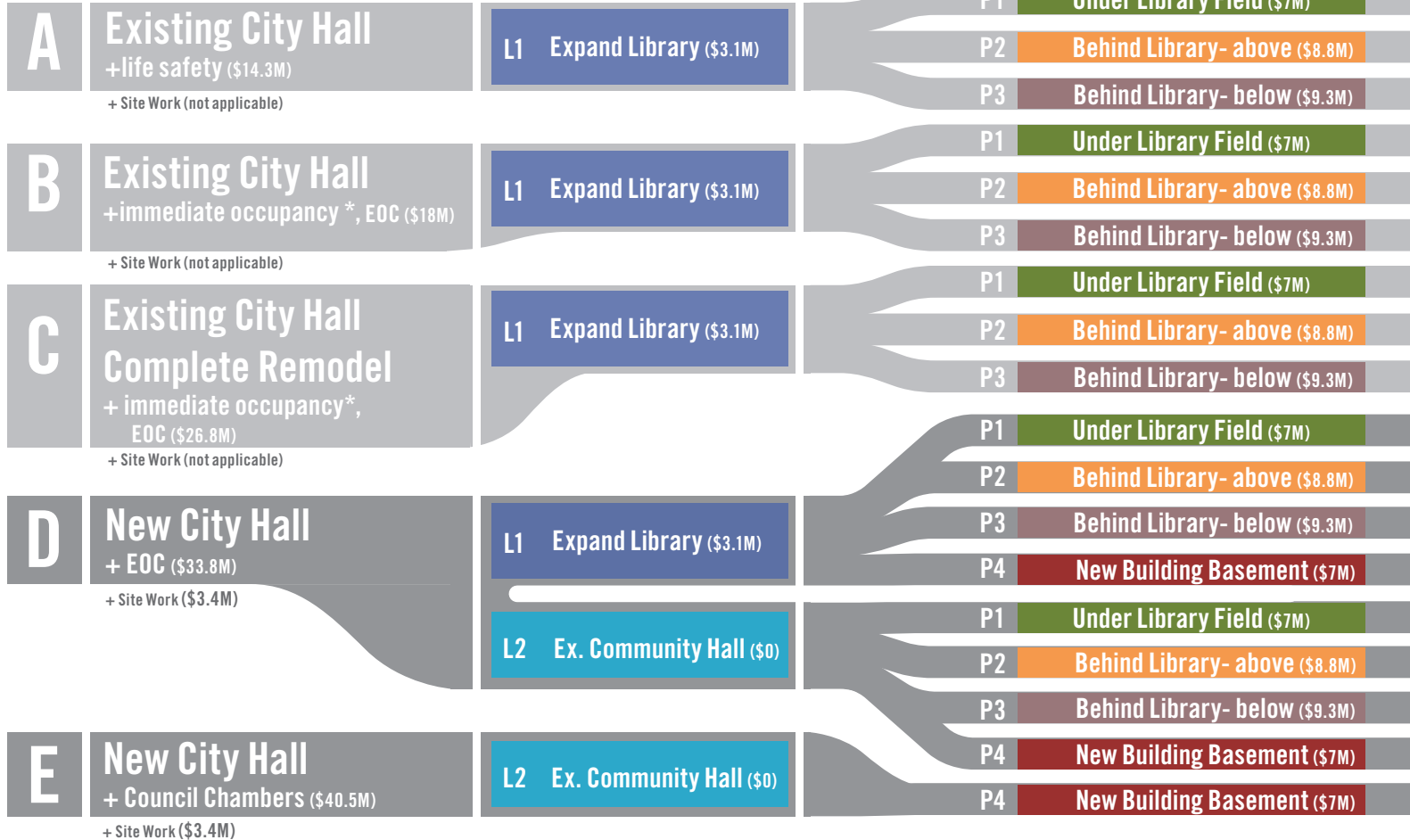
- Library takes control of Community Hall
- City reserves it for City Council meetings

PARKING ALTERNATIVES

CITY HALL SCENARIOS

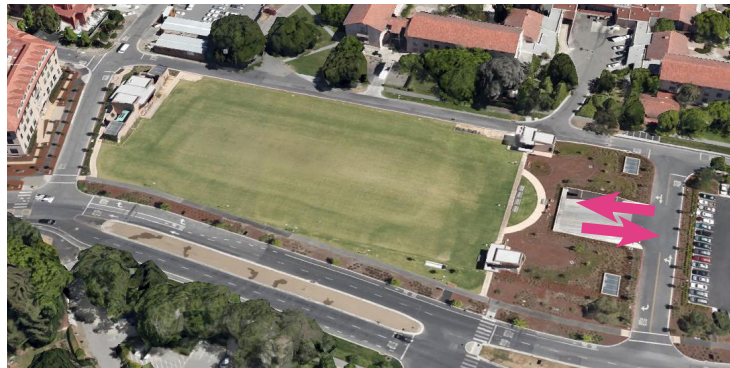
LIBRARY PROGRAM

STRUCTURED PKG SOLUTION



CIVIC CENTER MASTER PLAN

P1: UNDER LIBRARY FIELD



summary

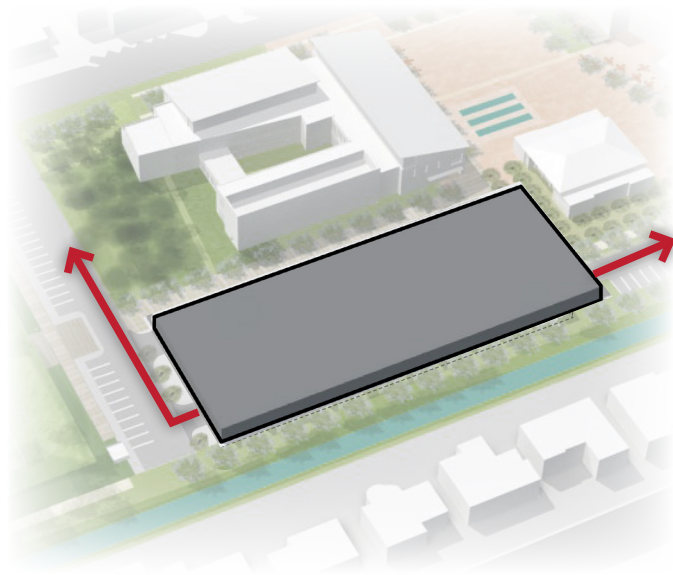
- Parking structure is entirely underground
- Accounts for an additional 100 spaces
- Field remains fully functional after construction
- Mechanically ventilated and artificially lit
- Accessible from Torre Avenue (with option to add secondary entrance/exit)
- Minimal visual obstruction above grade

Library Field

Underground Parking

\$53K/space X 100

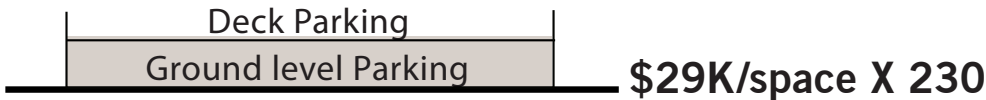
P2: BEHIND LIBRARY- ABOVE GROUND



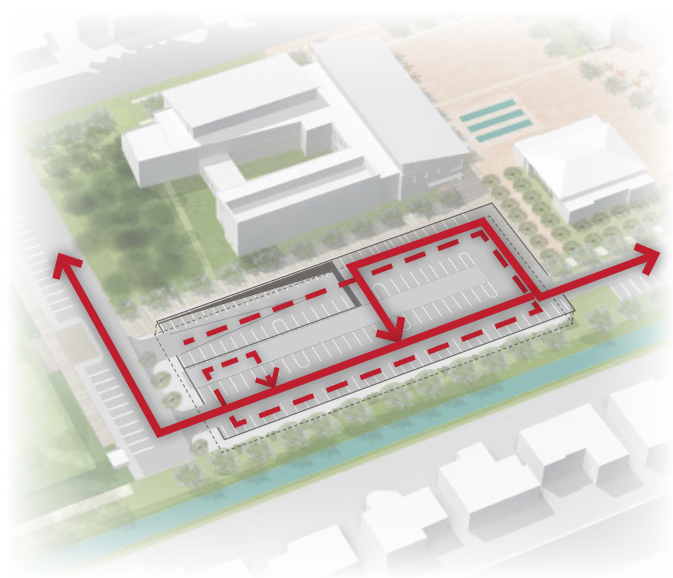
summary

Parking garage with 1 deck level (estimated at 15' high) located behind library on existing surface lot. Accounts for 100 additional spaces and replacement of 130 existing spaces.

- Convenient and centrally located to Library Plaza
- Can be phased independent of City Hall
- Requires removal and replacement of existing parking lot (130 spaces)
- Site-wide circulation is constrained
- Hinders future open and built expansion possibilities



P3: BEHIND LIBRARY- BELOW GROUND



Surface Parking

Underground Parking

\$30.5K/space X 230



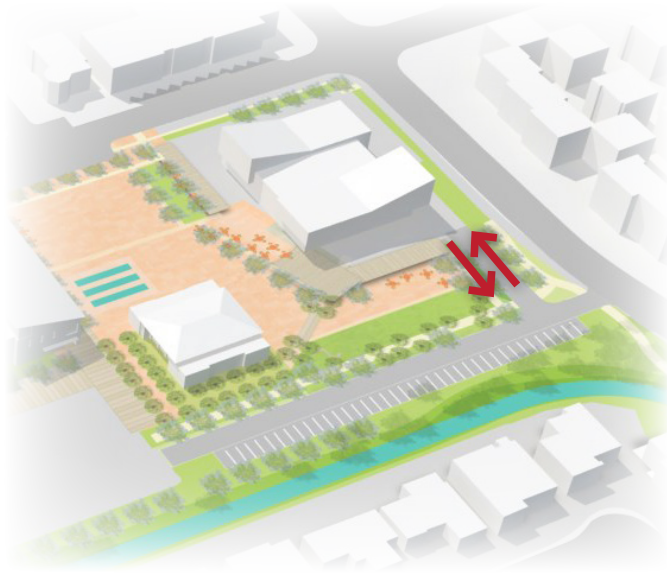
summary

Parking garage with 1 level below ground located behind library on the existing surface lot. Accounts for 100 additional spaces and replacement of 130 existing spaces.

- Convenient and centrally located to Library Plaza
- Can be phased independent of City Hall
- Requires removal and replacement of existing parking lot (130 spaces)
- Site-wide circulation is constrained
- Garage circulation within structure is constrained
- Hinders future open and built expansion possibilities
- Requires additional walls/fencing around underground opening

CIVIC CENTER MASTER PLAN

P4: BELOW NEW CITY HALL



City Hall

Underground Parking

\$53K/space X 100



summary

Underground parking below a new City Hall.
Accounts for an additional 100 spaces.

- Utilizes the already excavated basement level
- Convenient and centrally located to Library Plaza
- Integrated with existing site circulation
- Does not impact existing surface parking lots

STRUCTURED PARKING SOLUTIONS

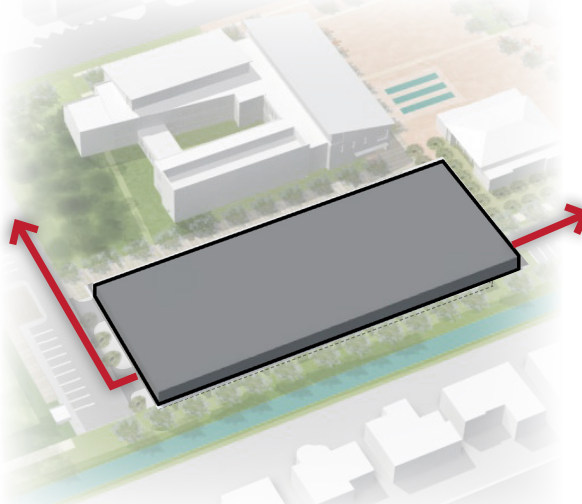
P1: UNDER LIBRARY FIELD



- Construction Cost: \$5.3M (100 spaces = \$53k/space)
- 100 new spaces

Net Const. Cost of 100 new spaces: \$53K/space

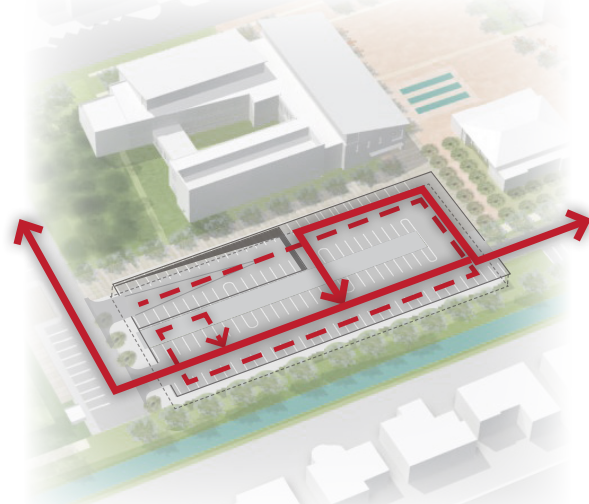
P2: BEHIND LIBRARY- ABOVE GRADE



- Construction Cost: \$6.7M (230 spaces = \$29k/space)
- 230 spaces=130 spaces demolished & replaced
+ 100 new spaces

Net Const. Cost of 100 new spaces: \$67K/space

P3: BEHIND LIBRARY- BELOW GRADE

































- Construction Cost: \$7M (230 spaces = \$30.5k/space)
- 230 spaces=130 spaces demolished & replaced
+ 100 new spaces

Net Const. Cost of 100 new spaces: \$70K/space

PREFERRED CCMP DECISION

EVALUATION CRITERIA

							
COST PER SQUARE FT.	IMMEDIATE OCCUPANCY POST EVENT	SEISMIC RESILIENCY	OPERATIONS MAINTENANCE SAVINGS	LIFE CYCLE COSTS REDUCTION	ADAPTABILITY + FLEXIBILITY	IMPROVED DAYLIGHTING + WORKPLACE	CIVIC IDENTITY + USER EXPERIENCE

SEISMIC (LIFE SAFETY)	A	\$333.00							
SEISMIC (IMMEDIATE OCCUPANCY) W/ EOC	B	\$441.00							
EXISTING CITY HALL COMPLETE REMODEL	C	\$663.00							
NEW CITY HALL BUILDING	D	\$646.00							
NEW CITY HALL + COUNCIL CHAMBERS	E	\$626.00							

OPTIMAL  LIMITED 

CITY HALL SCENARIOS

LIBRARY PROGRAM

STRUCTURED PKG SOLUTION

COST (in millions)

Scenario	Library Program	Structured Package Solution	Cost (in millions)
A Existing City Hall + life safety (\$14.3M) + Site Work (not applicable)	L1 Expand Library (\$3.1M)	P1 Under Library Field (\$7M)	\$ 24.4
		P2 Behind Library- above (\$8.8M)	\$ 26.2
		P3 Behind Library- below (\$9.3M)	\$ 26.6
B Existing City Hall + immediate occupancy *, EOC (\$18M) + Site Work (not applicable)	L1 Expand Library (\$3.1M)	P1 Under Library Field (\$7M)	\$ 28.1
		P2 Behind Library- above (\$8.8M)	\$ 29.9
		P3 Behind Library- below (\$9.3M)	\$ 30.3
C Existing City Hall Complete Remodel + immediate occupancy*, EOC (\$26.8M) + Site Work (not applicable)	L1 Expand Library (\$3.1M)	P1 Under Library Field (\$7M)	\$ 36.9
		P2 Behind Library- above (\$8.8M)	\$ 38.7
		P3 Behind Library- below (\$9.3M)	\$ 39.2
D New City Hall + EOC (\$33.8M) + Site Work (\$3.4M) ** + New City Hall basement fill (\$1.5M) in P1, P2 and P3	L1 Expand Library (\$3.1M)	P1 Under Library Field (\$7M)	\$ 48.8 **
		P2 Behind Library- above (\$8.8M)	\$ 50.6 **
		P3 Behind Library- below (\$9.3M)	\$ 51.1 **
		P4 New Building Basement (\$7M)	\$ 47.3
	L2 Ex. Community Hall (\$0)	P1 Under Library Field (\$7M)	\$ 45.7 **
		P2 Behind Library- above (\$8.8M)	\$ 47.5 **
E New City Hall + Council Chambers (\$40.5M) + Site Work (\$3.4M)	L2 Ex. Community Hall (\$0)	P3 Behind Library- below (\$9.3M)	\$ 48.0 **
		P4 New Building Basement (\$7M)	\$ 44.2
		P4 New Building Basement (\$7M)	\$ 50.9

CIVIC CENTER MASTER PLAN

RECOMMENDED CCMP OPTION

D

New City Hall

+ EOC (\$33.8M)

+ Site Work (\$3.4M)

L1 Expand Library (\$3.1M)

P4

New Building Basement (\$7M)

\$ 47.3M

LIBRARY EXPANSION:
Expanded for 100 person

NEW CITY HALL BUILDING:
with EOC

PARKING:
BELOW CITY HALL
100 Spaces

SITE WIDE ELEMENTS CONSIDERATIONS

SITE WIDE CONSIDERATIONS

UNSTRUCTURED OPEN SPACE

PEDESTRIAN / BIKE CONNECTION

PLAZA ENHANCEMENTS

FOOD OPTIONS

CIVIC CENTER MASTER PLAN CITY COUNCIL MEETING



CITY OF CUPERTINO
OCT. 21, 2014

